

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10632, 1534
Source: 01PC
Date Processed by STIC: 8-12-03

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry directly to:

U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202

U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/632, 534
attn: new rules cases:	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220><223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If Intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10 Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12Patentin 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001



OIPE

RAW SEQUENCE LISTING DATE: 08/12/2003 PATENT APPLICATION: US/10/632,534 TIME: 07:32:26

Input Set : E:\AMBI065US.APP.txt

```
3 <110> APPLICANT: WINKLER, MATTHEW M.
             BROWN, DAVID
      6 <120> TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
             MULTIPLE NUCLEIC ACID SAMPLES
      9 <130> FILE REFERENCE: AMBI:065US
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/632,534
                                                           Only one 2140> 41417
     12 <141> CURRENT FILING DATE: 2003-07-31
                                                          -p These are prior application numbers 

2/507, 2/5/7

W--> 14/2140> CURRENT APPLICATION NUMBER: PCT/US02/03169.
W--> 15 <141> CURRENT FILING DATE: 2003-07-31
W--> 17 <140> CURRENT APPLICATION NUMBER: 60/265,692
W--> 18\<141> CURRENT FILING DATE: 2003-07-31
     20 <160> NUMBER OF SEQ ID NOS: 24
     22 <170> SOFTWARE: PatentIn Ver. 2.1
     24 <210> SEQ ID NO: 1
     25 <211> LENGTH: 21
     26 <212> TYPE: DNA
     27 <213> ORGANISM: Artificial Sequence
                                      Does item 11 on error
W--> 29 <220> FEATURE:
W-->(29 '<223> OTHER INFORMATION:
W--> 29 < 400 > 1
                                                                           21
     30 ggtgttctcc atgtcctttg t
     33 <210> SEQ ID NO: 2
     34 <211> LENGTH: 21
     35 <212> TYPE: DNA
     36 <213> ORGANISM: Artificial Sequence
     38 <220> FEATURE:
     39 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
              Primer
     42 <400> SEQUENCE: 2
                                                                           21
     43 ttggggaact gggcagactc a
     46 <210> SEQ ID NO: 3
     47 <211> LENGTH: 23
     48 <212> TYPE: DNA
     49 <213> ORGANISM: Artificial Sequence
     51 <220> FEATURE:
     52 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     53
              Primer
     55 <400> SEQUENCE: 3
                                                                           23
     56 caaacctctg gaggaagtgc taa
     59 <210> SEQ ID NO: 4
     60 <211> LENGTH: 23
     61 <212> TYPE: DNA
     62 <213> ORGANISM: Artificial Sequence
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RAW SEQUENCE LISTING DATE: 08/12/2003 PATENT APPLICATION: US/10/632,534 TIME: 07:32:26

Input Set : E:\AMBI065US.APP.txt

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65 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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68 <400> SEQUENCE: 4
                                                                      23
69 gtgggaagca cttaattatc aag
72 <210> SEQ ID NO: 5
73 <211> LENGTH: 23
74 <212> TYPE: DNA
75 <213> ORGANISM: Artificial Sequence
77 <220> FEATURE:
78 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
79
         Primer
81 <400> SEOUENCE: 5
                                                                      23
82 ccttgtgcgg ttgtgttctc att
85 <210> SEO ID NO: 6
86 <211> LENGTH: 23
87 <212> TYPE: DNA
88 <213> ORGANISM: Artificial Sequence
90 <220> FEATURE:
91 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
      Primer
94 <400> SEQUENCE: 6
                                                                      23
95 tctcacacat ccctaggaac cag
98 <210> SEQ ID NO: 7
99 <211> LENGTH: 23
100 <212> TYPE: DNA
101 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:
104 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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107 <400> SEQUENCE: 7
                                                                       23
108 tgctgcctcc aagaacacaa ctg
111 <210> SEQ ID NO: 8
112 <211> LENGTH: 23
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
          Primer
120 <400> SEQUENCE: 8
                                                                        23
121 catgatcgtc tttagccttt cca
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 21
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
         Primer
133 <400> SEQUENCE: 9
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RAW SEQUENCE LISTING DATE: 08/12/2003 PATENT APPLICATION: US/10/632,534 TIME: 07:32:26

Input Set : E:\AMBI065US.APP.txt

Output Set: N:\CRF4\08122003\J632534.raw

21 134 tcgaactctg ctgatagcca a 137 <210> SEQ ID NO: 10 138 <211> LENGTH: 23 139 <212> TYPE: DNA 140 <213> ORGANISM: Artificial Sequence 142 <220> FEATURE: 143 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Primer 144 146 <400> SEQUENCE: 10 23 147 gcagtaaaat gtccttctcc tcc 150 <210> SEQ ID NO: 11 151 <211> LENGTH: 22 152 <212> TYPE: DNA 153 <213> ORGANISM: Artificial Sequence 155 <220> FEATURE: 156 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 157 Primer 159 <400> SEQUENCE: 11 22 160 gtgaagccca accaacaaag ag 163 <210> SEQ ID NO: 12 164 <211> LENGTH: 22 165 <212> TYPE: DNA 166 <213> ORGANISM: Artificial Sequence 168 <220> FEATURE: 169 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 170 Primer 172 <400> SEQUENCE: 12 22 173 ttggaggatg cagctaaagt tc 176 <210> SEQ ID NO: 13 177 <211> LENGTH: 26 178 <212> TYPE: DNA 179 <213> ORGANISM: Artificial Sequence 181 <220> FEATURE: 182 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Primer 185 <400> SEQUENCE: 13 26 186 ctgtaatacg actcactata gggaga 189 <210> SEQ ID NO: 14 190 <211> LENGTH: 27 191 <212> TYPE: DNA 192 <213> ORGANISM: Artificial Sequence 194 <220> FEATURE: 195 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 196 Primer 198 <400> SEQUENCE: 14 27. 199 ctgatttagg tgacactata gaagagt 202 <210> SEQ ID NO: 15 203 <211> LENGTH: 61

204 <212> TYPE: DNA

RAW SEQUENCE LISTING DATE: 08/12/2003 PATENT APPLICATION: US/10/632,534 TIME: 07:32:26

Input Set : E:\AMBI065US.APP.txt

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     207 <220> FEATURE:
     208 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
     209
               Primer
     211 <220> FEATURE:
     212 <221> NAME/KEY: modified base
     213 <222> LOCATION: (60)
     214 <223> OTHER INFORMATION: V = A, G or C
     216 <400> SEQUENCE: 15
     217 gctgatggcg atgaatgaac actgtaatac gactcactat agggagattt ttttttttv 60
W--> 218(n)
                                -Dunexplained, see page 6
     221 <210> SEQ ID NO: 16
     222 <211> LENGTH: 61
     223 <212> TYPE: DNA
     224 <213> ORGANISM: Artificial Sequence
     226 <220> FEATURE:
     227 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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     230 <220> FEATURE:
     231 <221> NAME/KEY: modified base
     232 <222> LOCATION: (60)
     233 <223> OTHER INFORMATION: V = A, G or C
     235 <400> SEQUENCE: 16
     236 gctgatggcg atgaatgaac actgatttag gtgacactat agaagagttt ttttttttv 60
W--> 237 n
240 <210> SEQ ID NO: 17
     241 <211> LENGTH: 168
     242 <212> TYPE: DNA
     243 <213> ORGANISM: Artificial Sequence
     245 <220> FEATURE:
     246 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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     247
     249 <400> SEQUENCE: 17
     250 taatacgact cactataggg ttcgggctta ggctccagtg cctgttcggt ggtcgcggcg 60
     251 ctgatggcga tgaatgaaca ctgcggcaag ccgcttaatg acactcgttt gctggctttg 120
     252 atgggcgagc tggaaggccg tatctccggc agcattcatt acgacaaa
     255 <210> SEQ ID NO: 18
     256 <211> LENGTH: 24
     257 <212> TYPE: DNA
     258 <213> ORGANISM: Artificial Sequence
     260 <220> FEATURE:
     261 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
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     264 <400> SEQUENCE: 18
                                                                            24
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     268 <210> SEQ ID NO: 19
     269 <211> LENGTH: 21
     270 <212> TYPE: DNA
     271 <213> ORGANISM: Artificial Sequence
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DATE: 08/12/2003

TIME: 07:32:26 PATENT APPLICATION: US/10/632,534 Input Set : E:\AMBI065US.APP.txt Output Set: N:\CRF4\08122003\J632534.raw W--> 273/<220> FEATURE: W--> 273 < 223 > OTHER INFORMATION:W--> 273 <400> 19 21 274 ggtgttctcc atgtcctttg t 277 <210> SEQ ID NO: 20 278 <211> LENGTH: 23 279 <212> TYPE: DNA 280 <213> ORGANISM: Artificial Sequence 282 <220> FEATURE: 283 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 284 Primer 286 <400> SEQUENCE: 20 23 287 caaacctctg gaggaagtgc taa 290 <210> SEQ ID NO: 21 291 <211> LENGTH: 23 292 <212> TYPE: DNA 293 <213> ORGANISM: Artificial Sequence 295 <220> FEATURE: 296 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Primer 299 <400> SEQUENCE: 21 23 300 ccttgtgcgg ttgtgttctc att 303 <210> SEQ ID NO: 22 304 <211> LENGTH: 23 305 <212> TYPE: DNA 306 <213> ORGANISM: Artificial Sequence 308 <220> FEATURE: 309 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 310 Primer 312 <400> SEQUENCE: 22 23 313 tgctgcctcc aagaacacaa ctg 316 <210> SEQ ID NO: 23 317 <211> LENGTH: 21 318 <212> TYPE: DNA 319 <213> ORGANISM: Artificial Sequence 321 <220> FEATURE: 322 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 323 Primer 325 <400> SEQUENCE: 23 21 326 tcgaactctg ctgatagcca a 329 <210> SEQ ID NO: 24 330 <211> LENGTH: 22 331 <212> TYPE: DNA

335 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

RAW SEQUENCE LISTING

22

334 <220> FEATURE:

Primer 338 <400> SEOUENCE: 24

339 gtgaagccca accaacaaag ag

336

332 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/632,534 DATE: 08/12/2003 TIME: 07:32:27

Input Set : E:\AMBI065US.APP.txt

Output Set: N:\CRF4\08122003\J632534.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:15; N Pos. 61 Seq#:16; N Pos. 61

explanation

Use of <220> Feature (NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings. Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or"Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104,pp.29631-32) (Sec.1.823 of new Rules)

Seq#:1,19

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/632,534 TIME: 07:32:27

DATE: 08/12/2003

Input Set : E:\AMBI065US.APP.txt

- L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
- L:14 M:280 W: Numeric Identifier already exists, <140> found multiple times
- L:14 M:281 W: Numeric Fields not Ordered, <140> not ordered!.
- L:14 M:270 C: Current Application Number differs, Replaced Current Application Number
- L:15 M:280 W: Numeric Identifier already exists, <141> found multiple times
- L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
- L:17 M:280 W: Numeric Identifier already exists, <140> found multiple times
- L:17 M:281 W: Numeric Fields not Ordered, <140> not ordered!.
- L:17 M:270 C: Current Application Number differs, Replaced Current Application Number
- L:18 M:280 W: Numeric Identifier already exists, <141> found multiple times
- L:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date
- L:29 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:1, <213> ORGANISM:Artificial Sequence
- L:29 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:1, <213>
- ORGANISM:Artificial Sequence L:29 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:29
- L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:60
- L:237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:60
- L:273 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:19, <213>
- ORGANISM: Artificial Sequence
- L:273 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:19, <213>
- ORGANISM: Artificial Sequence
- L:273 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:19,Line#:273